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ABSTRACT

This study compared (1) the mean reading instructional emphases reported by teachers associated with high achieving students of reading with the mean reading instructional emphases reported by teachers associated with low achieving students of reading, and (2) the mean reading instructional emphases reported by third grade teachers with the mean reading instructional emphases reported by sixth grade teachers. Samples of third and sixth grade teachers who taught reading in a self-contained classroom were classified as high achieving teachers of reading or low achieving teachers of reading through the use of a least squares prediction line. The teacher's responses to each item on "The Survey of Teacher Emphases in Reading Instruction" were totaled for each of seven categories and data were collected on the summated scores for each subcategory. Significant differences were found between grade levels for reading instructional emphases in the areas of oral reading, word attack, and double categories. No significant differences were noted for instructional emphases in the areas of oral reading, word attack, and double categories. No significant differences were noted for instructional emphasis between the reading achievement levels of classes. Further exploration of these data were conducted and an argument against methodological incarceration was deemed appropriate. (Author/JM)

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RELATIONSHIP BETWEEN SELECTED AREAS OF TEACHER EMPHASES AND STUDENT ACHIEVEMENT IN READING

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CS 002 333

Abstract

RELATIONSHIP BETWEEN SELECTED AREAS OF TEACHER EMPHASES AND PUPIL ACHIEVEMENT IN READING

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PURPOSE: This study compared the mean reading instructional emphases reported by teachers associated with high achieving students of reading with the mean reading instructional emphases reported by teachers associated with Low Achieving students of reading. Also compared were the mean reading instructional emphases reported by third-grade teachers with the mean reading instructional emphases reported by sixth-grade teachers.

METHODS: Samples of third- and sixth-grade teachers who taught reading in a self-contained classroom were classified as High Achieving teachers of reading or Low Achieving teachers of reading through the use of a least squares prediction line.

The teacher's responses to each item on The Survey of Teacher Emphases in Reading Instruction (STERI) were totaled for each of seven subcategories. Data were collected on the summated scores for each subcategory on the STERI. The data were analyzed using a 2X2 multivariate analysis of variance design.

RESULTS AND CONCLUSIONS: Significant differences were found between grade levels for reading instructional emphases in the areas of oral reading, word attack, and double categories. No significant differences were noted for instructional emphasis between the reading achievement levels of classes. However, further exploration of these data were conducted and an argument against methodological incarceration was deemed appropriate.

RELATIONSHIP BETWEEN SELECTED AREAS OF TEACHER EMPHASES AND STUDENT ACHIEVEMENT IN READING

Purpose and Related Literature

The purpose of this study was to determine the effects of selected teacher instructional emphases on pupil achievement in self-contained developmental reading programs.

Many authorities in teacher education believe that teaching is a complex art and that teacher effectiveness varies with the student and situation. This view, according to Brophy (1972), is held by those who do not believe student achievement gain is an important measure of teacher effectiveness. Brophy points out that this view may be perpetuated by the fact that researchers have continually failed to demonstrate a clear relation between teaching behaviors and student achievement.

One general conclusion that seems to have been reached in the area of teacher effectiveness and reading instruction, is that the most important variable with respect to differences in student achievement, when methods, materials, grouping practices, and so on, are compared is the teacher (Bond and Dykstra, 1967). However, Rutherford (1971) indicates that those factors indicative of the effective teacher of reading have not yet been empirically identified. This viewpoint is further supported by the editors of the Reading Research Quarterly (1974-75). They contend that much of the reading research is narrow in its focus and fails to address some of the more important research issues - one of which is the teaching of reading.

Theoretical Framework

One possible explanation for one teacher being more effective than another in reading instruction could be the emphases that the effective teacher gives to the various aspects of a typical reading program, that is, levels of comprehension, individualized instruction, language development, oral reading, diagnosis, and decoding.

Although no universally accepted definition of reading exists, there are some similarities among reading authorities (Goodman, 1970; Durkin, 1974; Heilman, 1972; Harris, 1969) about what constitutes reading and what skills are necessary for the development of good readers. For the purpose of this research the areas of reading instruction emphases selected are those most often found in the professional literature, basal series, and definitions of reading.

The definitions and areas of reading instruction reviewed suggests some agreement among reading authorities about the skills necessary for reading. However, just knowing what skills should be taught does not guarantee that a teacher of reading will be effective. The emphases that a teacher gives to the various components of a developmental reading program could be more important than knowing the necessary skills to teach.

Hypotheses

A sound reading program should enable students to become competent in the reading skill areas as defined by reading authorities. However, the varying emphases that a teacher places on these selected areas of reading instruction could account for variance in pupil performance.

Although the following hypotheses were tested in this study, a secondary aspect of this research was considered exploratory--moving toward a better understanding of what constitutes an effective teacher of reading.

Seven hypotheses were tested, six of which had the same format: Teachers teaching high achieving students in reading report greater emphases on individualized instruction, language development, comprehension skills, diagnosis, word attack skills, and desirable but not easily classifiable reading skills than do teachers teaching low achieving students in reading. The seventh hypotheses was: Teachers teaching high achieving students in reading report less emphasis on oral reading than do teachers teaching low achieving students in reading.

Identification of High and Low Achieving Teachers in Reading Instruction

Samples of third- and sixth-grade teachers who taught reading in a self-contained classroom, in a large midwestern city, were classified as High Achieving teachers of reading or Low Achieving teachers of reading through the use of least squares prediction line (Glass and Stanley, 1970). Teachers whose class means fell one-half a standard error of estimate or more above the prediction line were deemed High Achieving teachers of reading and teachers whose class means fell one-half a standard error of estimate or more below the prediction line were deemed Low Achieving teachers of reading. The prediction line was generated through the use of class mean IQ scores and class mean total reading achievement scores.

The mean IQ score was determined by the Otis-Lennon Mental Ability Test, Form J, administered in the fall. The mean reading achievement score was determined by the SRA Achievement Series, administered by the school system in the spring. The mean reading score used was the mean total reading score for each class.

Based on each third-grade teacher's class mean IQ and mean total reading achievement on the aforementioned tests, a prediction line was computed and those teachers whose class means fell one-half a standard error of

estimate or greater above the prediction line were deemed High Achieving third-grade teachers of reading; those that fell one-half a standard error of estimate or greater below the prediction line were deemed Low Achieving third-grade teachers of reading. Those third-grade teacher's classes that fell less than one-half a standard error of estimate above or below the prediction line were discarded for the purposes of this study.

The same procedure was followed for the identification of High and Low Achieving sixth-grade teachers of reading.

One-half a standard error of estimate above and below the prediction line was considered necessary to account for the standard error measurement, to account for the lack of a cutoff point on the SRA, for the chance guessing probability score, and to increase the degree of confidence in identifying a teacher as High or Low Achieving in relation to actual vs. expected class achievement.

Figure I presents an example of the procedure used for the identification of High and Low third- and sixth-grade teachers of reading.

Insert Figure I

Assessment of Teacher Emphases

Each third- and sixth-grade teacher in the school system was administered the Survey of Teachers Emphases in Reading Instruction (STERI) questionnaire.

The STERI was designed by the researcher for the purpose of obtaining information about the varying emphases teachers gave to the different areas of a developmental reading program. The subcategories comprehension, diagnosis, word attack skills, oral reading, language development, and individualized instruction were identified as the commonly accepted important areas of a developmental reading program as identified by experts, basal readers, and previous research. Items were written that reflected these subcategories

as follows:

Students are instructed to use context to determine the meaning of unknown words.

1	2	3	4	5
very seldom	infrequently	sometimes	usually	most of the time

These items were submitted to a panel of five reading experts for determination of content validity. As a result of the judges' evaluation, the questionnaire contained 56 items each of which had an 80 percent or greater agreement among the judges concerning what the item was measuring. Table 1 summarizes the number of items in each subcategory of the STERI.

Insert Table 1

Reliability coefficients for the questionnaire with a pilot study were 0.78 for test-retest and 0.83 for Kuder-Richardson Formula 20. The split-half reliability coefficient for the teachers sampled (N=64) was 0.85.

Design

A random sample of 21 High Achieving and 21 Low Achieving teachers was drawn from all of the third-grade teachers who were identified as High Achieving and Low Achieving. However, all of the sixth-grade teachers identified as High and Low Achieving were used due to the small number of these who taught in self-contained classrooms.

Insert Table 2

Analyses of Data

A two-way multivariate analysis of variance was used to explore the difference between the responses on the questionnaire of the total sample of third-grade teachers and the total sample of sixth-grade teachers. The

MANOVA data for the grade level differences is shown in Table 3.

Insert Table 3

Significant differences were observed between responses of third-grade and sixth-grade teachers for the subcategories word attack skills emphases, oral reading emphases, and desirable but not easily classifiable emphases. Looking at the means for these subcategories it appears that the third-grade teachers placed more emphases on oral reading and word attack skills than did the sixth-grade teachers. The emphases in the double category favors the sixth-grade teachers.

Result of Hypotheses Testing Relating to Differences

A 2X2 multivariate analysis of variance was performed in which the mean emphases reported for the teachers identified as High Achieving was compared with the mean emphases reported for teachers identified as Low Achieving on the seven subcategories of the questionnaire. Table 4 presents the results of that anlaysis.

Insert Table 4

No significant differences were noted between the reported emphases for High and Low Achieving reading teachers, however these data do warrant further discussion.

Discussion

The hypotheses advanced to account for teacher variance in being successful in reading instruction were not supported by the data of this research. This conclusion supports the contention of Rutherford (1971) and

the summary of reading research by the editors of the Reading Research Quarterly (1974-75) that the factors which account for teacher effectiveness in reading have not yet been empirically identified.

However, another important consideration raised by the editors of the Reading Research Quarterly (1974-75), that reading research is being highly influenced by methodological incarceration allows for some speculative discussion about the results.

As this research was considered both hypotheses testing and exploratory, this researcher does not feel obligated to adhere to traditional research considerations, and the differences between grade levels as well as the differences between oral reading, language development, and diagnosis should be noted.

The significant differences between what third-grade teachers emphasized and what sixth-grade teachers emphasized in reading instruction supports the concept of sequential development of reading skills. The development of oral reading skills and word attack skills have been identified by reading authorities as skills which should be initiated in the primary grades and logically should receive greater emphases. However, the use of oral reading as a teaching technique has been discouraged by such reading authorities as Artley (1972), Durkin (1974), and Rupley (1974). Evidently, the admonition made by these writers has not been adopted by teachers of primary reading, since oral reading is still being used as a basic means of reading instruction. This idea becomes more credible when the mean emphases reported in oral reading is compared with the total score possible in this area. The total possible score in oral reading was 30.0 compared with a mean emphases reported by primary teachers of 23.01.

In the area of word attack skill emphases the mean score reported was 26.45 for the primary teachers compared with a total possible score of 30.00

in this subcategory. This result gives credence to the concept that primary teachers of reading consider word attack skill development an important aspect of their reading program. Although, the idea that children learn to read in the primary grades and read to learn in the intermediate grades has been attacked by reading authorities (Rupley, 1975) it appears that teachers of intermediate reading do not emphasize or reinforce word attack skills instruction to the degree which primary teachers do.

The significant difference noted in the area of double categories is more difficult to explain; however, because these were double categories, i.e., individualized instruction and diagnosis, primary teachers may have been teaching only one particular skill rather than combining skill instruction as it appeared the intermediate teachers were doing.

Although no significant differences were identified between the reported emphases of High and Low Achieving teachers of reading, some of the findings in the areas of diagnosis, oral reading, and language development warrant further discussion.

If investigators are going to make progress in identifying what constitutes effective reading instruction a basis for identifying credible variables must be established. In addition, the historical concept of setting an alpha level at .05 or less may be inappropriate for research dealing with effective reading instruction. The data base which is presently available for looking at effective reading instruction is minute when compared with the plethora of reading research being conducted. It might be better to say with a seventy percent degree of certainty that effective reading teachers do certain things in their reading instruction, than to say with a ninety-five percent degree of certainty that the characteristics of teacher effectiveness in reading instruction have not been identified.

The results of this study indicate, with a seventy percent degree of

certainty, that the effective teachers of elementary reading place greater emphases on diagnosis and less emphases on langauge development and oral reading than do the less effective teachers of reading.

These differences could contribute to higher pupil achievement in reading on the basis that effective reading teachers use diagnosis to identify their students' strengths and weaknesses in reading, and subsequent reading instruction is determined by student needs rather than the curriculum; are less concerned with changing the language patterns of their students than they are with providing the opportunity for learning how to read; and rely less on oral reading as their primary method of reading instruction.

The use of diagnosis is generally recognized as a good practice for teachers of reading if they are to meet the instructional needs of their pupils. The items on the questionnaire which measured teacher's use of diagnosis, incorporated several aspects of reading diagnosis. Among these aspects were items which measured teachers use of informal measures, standardized tests, and ongoing methods of diagnosis. To further speculate, effective teachers may not view diagnosis as pre and posttesting, but view diagnosis as an integral part of their reading instruction. As a result these teachers may continually monitor the process (their reading instruction) and the product (student progress) and make needed instructional changes.

The differences in the area of language development warrant further study. One logical tact for investigation in this area would be that over emphasis on language development may preclude reading instruction. If teachers concentrate on obtaining a close match between a childs' language and the language of the school then students may not have the opportunity to learn how to read. This view of reading and language then becomes cyclical - students are weak in language development, thus they need language instruction to be good readers and reading instruction is delayed. The

point being that the students' poor reading achievement may be more related to lack of opportunity to learn to read than it is to lack of language development.

Finally, the differences in oral reading emphases may be related to how a teacher views reading. If a teacher views reading as the correct pronunciation of words, then oral reading would receive greater emphasis. However, if comprehension is the goal of reading instruction, then oral reading would receive less emphasis. It appears that effective teachers are those who do not emphasize oral reading to a degree which precludes developing silent reading skills and comprehension skills.

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Figure 1

Example of Regression Line Used to Identify
High and Low Achieving Teachers of Reading

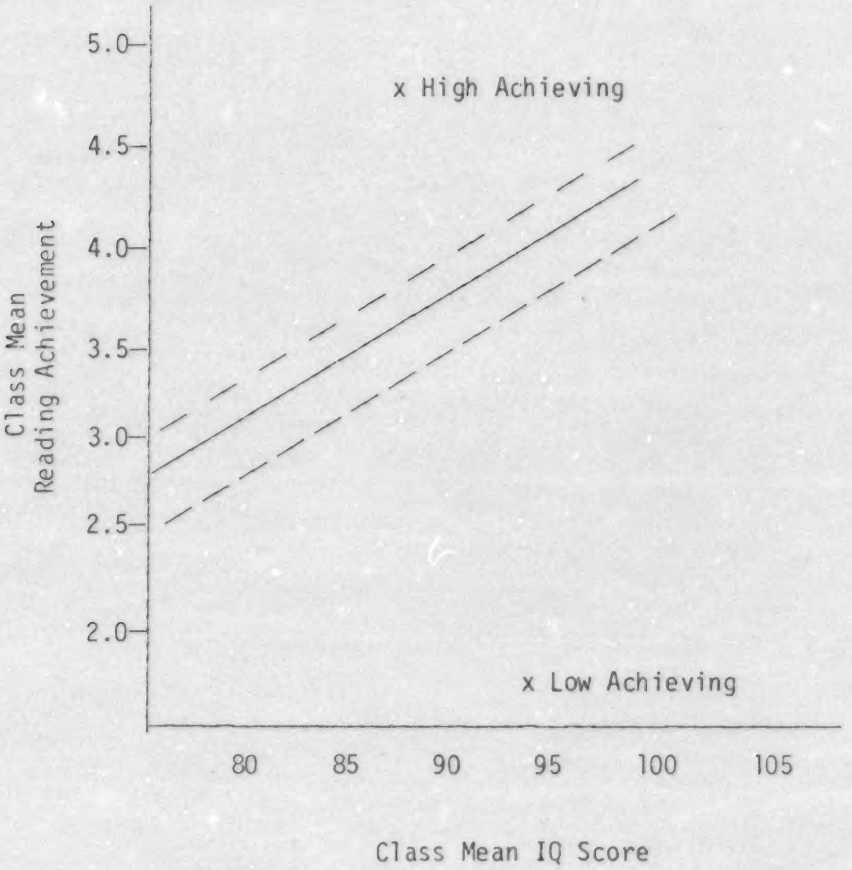

Table 1

Subcategories and Number of Items in Each Subcategory

Subcategory	Number of Items
Comprehension	9
Diagnosis	8
Word Attack	6
Oral Reading	6
Language Development	6
Individualized Instruction	6
Double Categories	6
Non-scoreable	9
Total	56

Table 2

Statistical Design

	Achievement	
	High	Low
Third Grade	n = 21	n = 21
Sixth Grade	n = 10	n = 13

Table 3

MANOVA Data for Grade Level

Differences on the Questionnaire

Variable	Grade 3 $\bar{X}$	Grade 6 $\bar{X}$	Univariate F	P Less Than
Comprehension	35.81	35.44	0.01	0.93
Diagnosis	30.19	29.25	0.58	0.44
Word Attack	26.45	24.24	6.86	0.01
Oral Reading	23.01	20.22	8.04	0.01
Language Development	21.80	22.20	0.15	0.70
Individualized Instruction	28.95	29.64	1.82	0.18
Double Categories	21.50	23.22	4.34	0.04

Table 4

Analysis of Variance Test on the Mean Emphases Scores

for the Subcategories of the Questionnaire

Variable	High Achieving $\bar{X}$	Low Achieving $\bar{X}$	Univariate F	P Less Than
Comprehension	35.70	36.00	0.05	0.81
Diagnosis	30.40	29.40	0.95	0.33
Word Attack	25.00	24.80	0.04	0.84
Oral Reading	21.60	24.70	1.36	0.24
Language Development	21.50	24.30	1.01	0.31
Individualized Instruction	29.10	29.70	0.42	0.51
Double Categories	22.10	22.20	0.01	0.96